

### REMARKS

Upon entry of this amendment, claims 15-17, 35, 38, and 49-73 are pending. Claims 1-14, 18-34, 36-37 and 39-48 have been cancelled herein without prejudice or disclaimer as drawn to non-elected inventions. Claims 15, 35 and 38 have been amended. Support for the amendment to claim 15 can be found in originally-filed claim 1. Claims 49-68 are newly added. Support for new claim 49 can be found at, e.g., Table 6 of the as-filed specification. Support for new claim 54 can be found at, e.g., page 28, line 26 to page 29, line 5; and Table 6 of the specification. Support for new claim 59 can be found at, e.g., Table 5 of the as-filed specification. Support for new claim 64 can be found at, e.g., page 37, lines 24-27; and Table 5 of the as-filed specification. Support for new claim 69 can be found at, e.g., originally-filed claim. Support for new claims 50, 55, 60, 65 and 70 can be found in, e.g., claim 16 as filed. Support for new claims 51, 56, 61, 66 and 71 can be found in, e.g., claim 17 as filed. Support for new claims 52, 57, 62, 67, and 72 can be found in, e.g., claim 35 as filed. Support for new claims 53, 58, 63, 68 and 73 can be found in, e.g., claim 38 as filed. No new matter has been introduced by the present amendments to the claims.

#### *Claim Rejection -- 35 U.S.C. § 101*

Claim 15 has been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter, the Examiner stating that the claim does not require that the antibody be isolated. In response, Applicants note that claim 15 has been amended herein to recite in part “[a]n isolated antibody.” Moreover, newly added independent claims 49, 54, 59, 64 and 69 also require an isolated antibody. This rejection has been overcome and should be withdrawn.

#### *Claim Rejections -- 35 U.S.C. § 103*

Claims 15, 16, 35 and 38 have been rejected under 35 U.S.C. § 103(a) as being obvious over Chen *et al.*, Oncogene 1991, 6:1057-61 (“Chen”) or Park *et al.*, Oncogene 1997, 14:553-42 (“Park”), in view of Harlow *et al.*, Antibodies, 1988 (“Harlow”). The Examiner states that Chen provides only a partial sequence of human eek, and Park teaches mouse eek, which is 95.6%

identical to human eek. Further, the Examiner states that Harlow teaches uses for antibodies and monoclonal antibodies.

Applicants have herein amended claim 15 to require that the isolated antibody immunospecifically binds to an isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 5. Chen, Park and Harlow do not teach or suggest the amino acid sequence of SEQ ID NO: 5. Therefore, this rejection has been overcome and should be withdrawn.

Moreover, Applicants assert that this rejection does not apply to newly added independent claims 49, 54, 59, 64 and 69. These new independent claims require an isolated polypeptide comprising an amino acid sequence at least 96% identical to the amino acid sequence of SEQ ID NO: 5, wherein the polypeptide has kinase activity; an isolated polypeptide comprising an amino acid sequence at least 99% identical to the amino acid sequence of SEQ ID NO: 5, wherein the polypeptide has kinase activity; an isolated antibody that immunospecifically binds to an isolated polypeptide comprising amino acids 28-992 of SEQ ID NO: 5; an isolated polypeptide variant of the amino acid sequence of SEQ ID NO: 5, wherein one amino acid residue in said variant differs from the amino acid sequence of SEQ ID NO: 5, wherein the polypeptide variant has kinase activity; or an isolated polypeptide comprising the mature form of the amino acid sequence of SEQ ID NO: 5. Chen, Park and Harlow do not teach or suggest any of the above-stated isolated polypeptides as required by independent claims 49, 54, 59, 64 and 69, or the corresponding dependent claims.

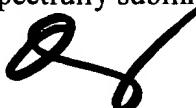
For the above-stated reasons, the pending claims are not obvious in view of Chen, Park and Harlow, and this rejection should be withdrawn.

Claim 17 has been rejected under 35 U.S.C. § 103(a) as being obvious over Chen or Park in view of Harlow, and in further view of Morrison et al., Advances in Immunology 44, 1989 (“Morrison”). The Examiner states that while Chen, Park and Harlow fail to teach humanized antibodies, such antibodies are taught by Morrison. As stated above, Chen, Park and Harlow fail to teach the isolated antibody that immunospecifically binds to an isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 5. The Examiner admits that Morrison fails to teach antibodies to instant SEQ ID NO: 5. Therefore, Morrison does not cure the deficiency of Chen, Park and Harlow. Thus, claim 17 is not obvious in view of Chen, Park, Harlow, and Morrison, and this rejection should be withdrawn.

### CONCLUSION

Based on the instant amendments and remarks, Applicants submit that this application is in condition for allowance and such action is respectfully requested. Should any questions or issues arise concerning the application, the Examiner is encouraged to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully submitted,



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